



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,193	08/05/2003	Patrick L. Von Behren	2003P03219US	8324

7590 11/29/2005

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

JAWORSKI, FRANCIS J

ART UNIT	PAPER NUMBER
----------	--------------

3737

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/635,193

Applicant(s)

VON BEHREN ET AL.

Examiner

Jaworski Francis J.

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 10-11, 13 – 14, 17 – 22 are rejected under 35 U.S.C. 102(e) as being

anticipated by Jong et al (US6572549) , or in the alternative as obvious based upon Jong et al in view of (US6500118) or Hossack et al (US2003/0097068).

Jong et al as earlier noted teaches 3D EFOV buildup, see

col. 9 lines 17-29. Applicants' arguments that Jong et al do not involve multiple

voxel dimensional overlaps are not well-taken, since in addition to the col. 9 passage col. 4 lines 45 – 55 makes clear that the assemblage of a complete scan volume by true volumetric increments versus assemblage by scan images in single voxel or image thickness increments are both considered as implementations in the alternative.

Nonetheless in the event that Jong et al be considered as applicants argue to not literally pertain to multiple voxel x,y,z dimensional overlaps/differences, it would have been obvious in view of Hashimoto ~~et al~~ to work with overlapping regions for correlation purposes (fig. 8a stated to be stylized to 2D for explanation purposes) or discontinuity detections (Fig. 9A similarly stylized), see col. 6 lines 58-62, col. 15 lines 47-56, col. 17 lines 19-56, or in view of Hossack et al since paras [0114 – 0116] proposed that volume scan increments be assembled by spatial averaging to even out transition between overlapping regions or adjacent volume increment data otherwise be used to modify the volume increment set, for example by anisotropic filtering. Both the latter also suggest position tracking

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jong et al alone or further in view of Hashimoto or Hossack et al as applied to claim 1 above, and further in view of Weng et al (US5782766, of record in the mentioned IDS) insofar as the latter reveals that the artisan would consider the built-up image to be a compounded image..

Claims 6, 12, 14, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li as applied to claim1 above, and further in view of Sumanaweera et

Art Unit: 3737

al (US6306091) col. 15 lines 8-21 since this reference teaches that in transformation registry between two overlapping three-dimensional (i.e. true volume) subsets (per col. 3 top), pressure distortion may be accommodated by particularizing the morphing or transforming therebetween.

Claims 9, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jong et al alone or further in view of Hashimoto or Hossack et al as applied to claim 1 above, and further in view of Li insofar as Li notes that external tracking sensors were known to determine transducer displacement between component scan and that EFOV data is acquired by a variety of scan types..

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jong et al alone or further in view of Hashimoto or Hossack et al as applied to claim 1 above, and further in view of Sumanaweera et al as the latter was applied in the prior Office action.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 3737

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738

FJJ:fjj

112305


Francis J. Jaworski
Primary Examiner